# 9VAC25-196 - GENERAL VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM (VPDES) PERMIT FOR NONCONTACT COOLING WATER DISCHARGES OF 50,000 GALLONS PER DAY OR LESS

#### 9VAC25-196-10. Definitions.

The words and terms used in this chapter shall have the meanings defined in § 62.1-44.2 et seq. of the Code of Virginia (State Water Control Law), and 9VAC25-31-10 et seq. (VPDES Permit Regulation) unless the context clearly indicates otherwise, except that for the purposes of this chapter:

"Blowdown" means a discharge of recirculating water from any cooling equipment or cooling process in order to maintain a desired quality of the recirculating water. Boiler blowdown is excluded from this definition.

"Cooling water" means water used for cooling which does not come into direct contact with any raw product, intermediate product (other than heat) or finished product. For the purposes of this general permit, cooling water can be generated from any cooling equipment blowdown or produced as a result of any noncontact cooling process through either a single pass (once through) or recirculating system.

"Department" or "DEQ" means the Virginia Department of Environmental Quality.

"Director" means the Director of the Virginia Department of Environmental Quality, or an authorized representative.

"Total maximum daily load" or "TMDL" means a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards and an allocation of that amount to the pollutant's sources. A TMDL includes wasteload allocations (WLAs) for point source discharges, and load allocations (LAs) for nonpoint sources or natural background or both, and must include a margin of safety (MOS) and account for seasonal variations.

# <u>9VAC25-196-15.</u> Applicability of incorporated references based on the dates that they became effective.

Except as noted, when a regulation of the U.S. Environmental Protection Agency set forth in Title 40 of the Code of Federal Regulations is referenced or adopted herein and incorporated by reference, that regulation shall be as it exists and has been published as a final regulation in the Federal Register prior to July 1, 2012, with the effective date as published in the Federal Register notice or March 2, 2013, whichever is later.

### 9VAC25-196-20. Purpose.

This general permit regulation governs point source discharges of noncontact cooling water of 50,000 gallons per day or less to surface waters.

### 9VAC25-196-30. Delegation of authority.

The director, or an authorized representative, may perform any act of the board provided under this chapter, except as limited by § 62.1-44.14 of the Code of Virginia.

### 9VAC25-196-40. Effective date of the permit.

This general permit will become effective on March 2, 2008 2013. This general permit will expire five years from the effective date on March 1, 2018. This general permit is effective as to any covered owner upon compliance with all the provisions of 9VAC25-196-50 and the receipt of this general permit.

#### 9VAC25-196-50. Authorization to discharge.

A. Any owner governed by this general permit is hereby authorized to discharge to surface waters of the Commonwealth of Virginia provided that the owner <u>files submits</u> and receives acceptance by the board of the registration statement of 9VAC25-196-60, <u>files submits</u> the required permit fee, and complies with the effluent limitations and other requirements of

- 9VAC25-196-70, and provided that: the board has not notified the owner that the discharge is not eligible for coverage in accordance with subsection B of this section.
- B. The board will notify an owner that the discharge is not eligible for coverage under this general permit in the event of any of the following:
  - 1. The owner has not been is required to obtain an individual permit according to in accordance with 9VAC25-31-170 B 3- of the VPDES Permit Regulation;
  - 2. The owner shall not is proposing to discharge to Class V stockable trout waters, Class VI natural trout waters, or any state waters specifically named in other board regulations or policies which prohibit such discharges. Chlorine or any other halogen compounds shall not be used for disinfection or other treatment purposes, including biocide applications, for any discharges to waters containing endangered or threatened species as identified in 9VAC25-260-110 C of the Water Quality Standards.;
  - 3. The owner shall neither use tributyltin and any chemical additives containing tributyltin, nor use any hexavalent chromium-based water treatment chemicals in the cooling water systems. The discharge violates or would violate the antidegradation policy in the Water Quality Standards at 9VAC25-260-30;
  - 4. The owner shall not use groundwater remediation wells as the source of cooling water The discharge is not consistent with the assumptions and requirements of an approved TMDL.
- C. Chlorine or any other halogen compounds shall not be used for disinfection or other treatment purposes, including biocide applications, for any discharges to waters containing endangered or threatened species as identified in 9VAC25-260-110 C of the Water Quality Standards.
- D. The owner shall not use tributyltin, any chemical additives containing tributyltin, or any hexavalent chromium-based water treatment chemicals in the cooling water systems.
- E. The owner shall not use groundwater remediation wells as the source of cooling water.
- B. Receipt of F. Compliance with this general permit constitutes compliance with the federal Clean Water Act, the State Water Control Law, and applicable regulations under either with the exceptions stated in 9VAC25-31-60 of the VPDES Permit Regulation. Approval for coverage under this general permit does not relieve any owner of the responsibility to comply with any other applicable federal, state, or local statute, ordinance, or regulation.
- G. Continuation of permit coverage.
  - 1. Any owner that was authorized to discharge under the cooling water discharges general permit issued in 2008 and that submits a complete registration statement on or before March 2, 2013, is authorized to continue to discharge under the terms of the 2008 general permit until such time as the board either:
    - a. Issues coverage to the owner under this general permit or
    - b. Notifies the owner that the discharge is not eligible for coverage under this general permit.
  - 2. When the owner that was covered under the expiring or expired general permit has violated or is violating the conditions of that permit, the board may choose to do any or all of the following:
    - a. Initiate enforcement action based upon the general permit that has been continued;
    - b. Issue a notice of intent to deny coverage under the amended general permit. If the general permit coverage is denied, the owner would then be required to cease the discharges authorized by the continued general permit or be subject to enforcement action for discharging without a permit;
    - c. Issue an individual permit with appropriate conditions; or

d. Take other actions authorized by the VPDES Permit Regulation (9VAC25-31).

#### 9VAC25-196-60. Registration statement.

The owner shall file a complete general VPDES permit registration statement for cooling water discharges. Any owner proposing a new discharge shall file a complete registration statement at least 30 days prior to the date planned for commencing operation of the new discharge. Any owner of an existing discharge covered by an individual VPDES permit who is proposing to be covered by this general permit shall file the registration statement at least 180 days prior to the expiration date of the individual VPDES permit. Any owner of an existing discharge not currently covered by a VPDES permit who is proposing to be covered by this general permit shall file a complete registration statement. The required registration statement shall contain the following information: A. Deadlines for submitting registration statements. The owner seeking coverage under this general permit shall submit a complete VPDES general permit registration statement in accordance with this section, which shall serve as a notice of intent for coverage under the general VPDES permit for cooling water discharges of 50,000 gallons per day or less.

- 1. New facilities. Any owner proposing a new discharge shall submit a complete registration statement at least 30 days prior to the date planned for commencing operation of the new discharge.
- 2. Existing facilities.
  - a. Any owner covered by an individual VPDES permit who is proposing to be covered by this general permit shall submit a complete registration statement at least 210 days prior to the expiration date of the individual VPDES permit.
  - b. Any owner that was authorized to discharge under the general VPDES permit that became effective on March 2, 2008, and who intends to continue coverage under this general permit shall submit a complete registration statement to the board on or before February 1, 2013.
- B. Late registration statements. <u>Late</u>—Registration statements will be accepted after March 2, 2013, but authorization to discharge will not be retroactive. Owners described in subdivision A 2 b of this section that submit <u>late</u>-registration statements after February 1, 2013 are authorized to discharge under the provisions of 9VAC25-196-50 G if a complete registration statement is submitted on or before March 2, 2013.
- C. The required registration statement shall contain the following information:
  - 1. Facility name and address, owner name and mailing address and telephone number and email address (if available);
  - 2. Operator name, mailing address, and telephone number, and email address (if available) if different from owner:
  - 3. Does the facility currently have a VPDES permit? Permit Number if yes;
  - 4. Listing of point source discharges that are not composed entirely of cooling water;
  - 5. Listing of type and size (tons) of cooling equipment or noncontact cooling water processes;
  - 6. The following information if any chemical or nonchemical treatment, or both, is employed in each of the cooling water systems:
    - a. Description of the chemical or nonchemical treatment, or both, to be employed (both chemical and nonchemical) and its purpose; for chemical additives other than chlorine, provide the information prescribed in subdivisions 6 b, c, d, e and f;
    - b. Name and manufacturer of each additive used:
    - c. List of active ingredients and percent composition;

- d. Proposed schedule and quantity of chemical usage, and either an engineering analysis, or a technical evaluation of the active ingredients, to determine the concentration in the discharge;
- e. Available aquatic toxicity information for each proposed additive used; and
- f. Any other information such as product or constituent degradation, fate, transport, synergies, bioavailability, etc., that will aid the board with the toxicity evaluation of the discharge;
- 7. Description of any type of treatment or retention being provided to the wastewater before discharge (i.e. retention ponds, settling ponds, etc.):
- 8. A schematic drawing of the cooling water equipment that shows the source of the cooling water, its flow through the facility, and each cooling water discharge point.
- 9. For cooling waters with a direct discharge to surface waters, a A USGS 7.5 minute topographic map or equivalent computer generated map extending to at least one mile beyond the property boundary. The map must show the outline of the facility and the location of each of its existing and proposed intake and discharge points, and must include all springs, rivers and other surface water bodies.
- 10. The following discharge information:
  - a. A listing of all cooling water discharges by a unique number;
  - b. The source of cooling water for each discharge;
  - c. An estimate of the maximum daily flow in gallons per day for each discharge;
  - d. The name of the waterbody receiving direct discharge or discharge through the municipal separate storm sewer system; and
  - e. The duration and frequency of the discharge for each separate discharge point; continuous, intermittent, or seasonal;
  - f. The name and contact information of the owner of the municipal separate storm sewer system that receives the discharge, if applicable.
- 11. Whether the facility will discharge to a municipal separate storm sewer system (MS4). If so, the name of the MS4 owner. The owner of the facility shall notify the MS4 owner in writing of the existence of the discharge within 30 days of coverage under the general permit, and shall copy the DEQ regional office with the notification. The notification shall include the following information: the name of the facility, a contact person and phone number, the location of the discharge, the nature of the discharge, and the facility's VPDES general permit number; and
- 12. The following certification:
  - I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.
- D. The registration statement shall be signed in accordance with 9VAC25-31-110.

#### 9VAC25-196-70. General permit.

Any owner whose registration statement is accepted by the board will receive the following permit and shall comply with the requirements therein and be subject to all requirements of 9VAC25-31.

## General Permit No: VAG25 Effective Date: March 2, 2008 2013 Expiration Date: March 1, 2013 2018

# GENERAL PERMIT FOR NONCONTACT COOLING WATER DISCHARGES OF 50,000 GALLONS PER DAY OR LESS

# AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM AND THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act, as amended, and pursuant to the State Water Control Law and regulations adopted pursuant thereto, owners of noncontact cooling water discharges of 50,000 gallons per day or less are authorized to discharge to surface waters within the boundaries of the Commonwealth of Virginia, except Class V stockable trout waters, Class VI natural trout waters, and those specifically named in board regulations or policies which prohibit such discharges. Chlorine or any other halogen compounds shall not be used for disinfection or other treatment purposes, including biocide applications, for any discharges to waters containing endangered or threatened species as identified in 9VAC25-260-110 C of the Water Quality Standards.

The authorized discharge shall be in accordance with this cover page, Part I - Effluent Limitations and Monitoring Requirements, and Part II - Conditions Applicable to all VPDES Permits, as set forth herein.

#### Part I

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS.

During the period beginning on the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge noncontact cooling water. Samples taken in compliance with the monitoring requirements specified below shall be taken at the following location(s): outfall(s):

Such discharges 1. Effluent limitations and monitoring requirements for the first four years of the permit term (March 2, 2013, through March 1, 2017). Discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
CHARACTERISTICS	Maximum	Minimum	Frequency	Sample Type
Flow (MGD)	0.05	NA	1/3 Months	Estimate
Temperature (°C)	(1)	NA	1/3 Months	Immersion Stabilization
pH (SU)	<del>9</del> 9.0 <sup>(2)</sup>	6 <u>6.0</u> <sup>(2)</sup>	1/3 Months	Grab
Ammonia-N <sup>(3)</sup> (mg/l)	NL	NA	1/3 Months	Grab
Total Residual Chlorine <sup>(3)</sup> (mg/l)	Nondetectable	NA	1/3 Months	Grab
Hardness (mg/l CaCO <sub>3</sub> ) <sup>(7)</sup>	NL	NA	1/3 Months	Grab
Total <del>Dissolved</del> <u>Recoverable</u> Copper <sup>(4)</sup> (μg/l)	NL	NA	1/3 Months	Grab
Total <del>Dissolved</del> <u>Recoverable</u> Zinc <sup>(4)</sup> (µg/l)	NL	NA	1/3 Months	Grab

Total <del>Dissolved</del> <u>Recoverable</u> Silver <sup>(4), (5)</sup> (μg/l)	NL	NA	1/3 Months	Grab
Total Phosphorus <sup>(6)</sup> (mg/l)	NL	NA	1/3 Months	Grab

NL = No limitation, monitoring required

NA = Not applicable

(1)The effluent temperature shall not exceed a maximum 32°C for discharges to nontidal coastal and piedmont waters, or 31°C for mountain and upper piedmont waters. No maximum temperature limit, only monitoring, applies to discharges to estuarine waters.

The effluent shall not cause an increase in temperature of the receiving stream of more than 3°C above the natural water temperature. The effluent shall not cause the temperature in the receiving stream to change more than 2°C per hour. Natural temperature is defined as that temperature of a body of water (measured as the arithmetic average over one hour) due solely to natural conditions without the influence of any point-source discharge.

- <sup>(2)</sup>Where the Water Quality Standards (9VAC25-260) establish alternate standards for pH in the waters receiving the discharge, those standards shall be the maximum and minimum effluent limitations.
- (3) Chlorine limitation of nondetectable (<0.1 mg/l) and chlorine monitoring only apply to outfalls directly discharging to surface waters where either: (i) a treatment additive that contains chlorine or chlorine compounds is used or (ii) the source of cooling water is chlorinated. All data below the quantification level (QL) of 0.1 mg/L shall be reported as "<QL." Ammonia monitoring only applies where the source of cooling water is disinfected using chloramines.
- (4) A specific analysis analytical method is not specified for these materials; however a maximum quantification level (Max QL) value for each metal has been established. An appropriate analysis method to meet the Max QL value shall be selected from the following list of EPA methods to achieve a quantification level that is less than the target level for the material under consideration: using any approved method presented in 40 CFR Part 136. If the test result is less than the method quantification level (QL), a "<[QL]" shall be reported where the actual analytical test QL is substituted for [QL].

Material	EPA Method	Target Level <u>Max</u> <u>QL</u> (µg/l)
Copper	<del>200.7, 200.8, 200.9, 1638, 1640</del>	<del>9.2</del> <u>1.0</u>
Zinc	<del>289.2, 200.7, 200.8, 1638, 1639</del>	<del>65.0</del> <u>50.0</u>
Silver	<del>200.7, 200.8, 200.9, 1638</del>	<del>1.2</del> <u>1.0</u>

Quality control/assurance information shall be submitted to document that the required quantification level QL has been attained.

2. Effluent limitations and monitoring requirements for the last year of the permit term (March 2, 2017, through March 1, 2018), discharges to freshwater receiving streams. Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS	MONITORING REQUIREMENTS
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<sup>(5)</sup> Silver monitoring is only required where <u>a</u> Cu/Ag anode is used.

<sup>&</sup>lt;sup>(6)</sup>Phosphorus monitoring is only required where <u>an</u> additive containing phosphorus is used.

<sup>(7)</sup>Hardness monitoring is only required for discharges to freshwater streams, perennial streams, or dry ditches.

	<u>Maximum</u>	<u>Minimum</u>	<u>Frequency</u>	Sample Type
Flow (MGD)	<u>0.05</u>	<u>NA</u>	1/3 Months	<u>Estimate</u>
Temperature (°C)	<u>(1)</u>	<u>NA</u>	1/3 Months	Immersion Stabilization
pH (SU)	9.0 <sup>(2)</sup>	<u>6.0<sup>(2)</sup></u>	1/3 Months	<u>Grab</u>
Ammonia-N <sup>(3)</sup> (mg/l)	<u>NL</u>	<u>NA</u>	1/3 Months	<u>Grab</u>
Total Residual Chlorine <sup>(3)</sup> (mg/l)	<u>Nondetectable</u>	<u>NA</u>	1/3 Months	<u>Grab</u>
Total Recoverable Copper <sup>(4)</sup> (µg/I)	9.0	<u>NA</u>	1/3 Months	<u>Grab</u>
Total Recoverable Zinc <sup>(4)</sup> (μg/l)	120	<u>NA</u>	1/3 Months	<u>Grab</u>
Total Recoverable Silver <sup>(4),</sup> (b) (µg/l)	3.4	<u>NA</u>	1/3 Months	<u>Grab</u>
Total Phosphorus(6) (mg/l)	<u>NL</u>	<u>NA</u>	1/3 Months	<u>Grab</u>

#### NL = No limitation, monitoring required

#### NA = Not applicable

(1) The effluent temperature shall not exceed a maximum 32°C for discharges to nontidal coastal and piedmont waters, or 31°C for mountain and upper piedmont waters. No maximum temperature limit, only monitoring, applies to discharges to estuarine waters.

The effluent shall not cause an increase in temperature of the receiving stream of more than 3°C above the natural water temperature. The effluent shall not cause the temperature in the receiving stream to change more than 2°C per hour. Natural temperature is defined as that temperature of a body of water (measured as the arithmetic average over one hour) due solely to natural conditions without the influence of any point-source discharge.

(2)Where the Water Quality Standards (9VAC25-260) establish alternate standards for pH in the waters receiving the discharge, those standards shall be the maximum and minimum effluent limitations.

(3) Chlorine limitation of nondetectable (<0.1 mg/l) and chlorine monitoring only apply to outfalls directly discharging to surface waters where either: (i) a treatment additive that contains chlorine or chlorine compounds is used or (ii) the source of cooling water is chlorinated. All data below the quantification level (QL) of 0.1 mg/L shall be reported as "<QL." Ammonia monitoring only applies where the source of cooling water is disinfected using chloramines.

(4) A specific analytical method is not specified; however a maximum quantification level (Max

QL) value for each metal has been established. An appropriate method to meet the Max QL value shall be selected using any approved method presented in 40 CFR Part 136. If the test result is less than the method quantification level (QL), a "<[QL]" shall be reported where the actual analytical test QL is substituted for [QL].

<u>Material</u>	Max QL (µg/l)
<u>Copper</u>	<u>1.0</u>
<u>Zinc</u>	<u>50.0</u>
<u>Silver</u>	<u>1.0</u>

Quality control/assurance information shall be submitted to document that the required QL has been attained.

3. Effluent limitations and monitoring requirements for the last year of the permit term (March 2, 2017, through March 1, 2018), discharges to saltwater receiving streams. Such discharges shall be limited and monitored by the permittee as specified below:

<u>EFFLUENT</u>	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
<u>CHARACTERISTICS</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Frequency</u>	Sample Type
Flow (MGD)	<u>0.05</u>	<u>NA</u>	1/3 Months	<u>Estimate</u>
Temperature (°C)	(1)	<u>NA</u>	1/3 Months	Immersion Stabilization
pH (SU)	9.0(2)	<u>6.0<sup>(2)</sup></u>	1/3 Months	<u>Grab</u>
Ammonia-N <sup>(3)</sup> (mg/l)	<u>NL</u>	<u>NA</u>	1/3 Months	<u>Grab</u>
Total Residual Chlorine <sup>(3)</sup> (mg/l)	<u>Nondetectable</u>	<u>NA</u>	1/3 Months	<u>Grab</u>
Total Recoverable Copper <sup>(4)</sup> (µg/l)	6.0	<u>NA</u>	1/3 Months	<u>Grab</u>
Total Recoverable Zinc <sup>(4)</sup> (µg/l)	<u>81</u>	<u>NA</u>	1/3 Months	<u>Grab</u>
Total Recoverable Silver <sup>(4),</sup> (5) (µg/l)	<u>1.9</u>	<u>NA</u>	1/3 Months	<u>Grab</u>
Total Phosphorus <sup>(6)</sup> (mg/l)	<u>NL</u>	<u>NA</u>	1/3 Months	<u>Grab</u>

#### NL = No limitation, monitoring required

#### NA = Not applicable

(1) The effluent temperature shall not exceed a maximum 32°C for discharges to nontidal coastal and piedmont waters, or 31°C for mountain and upper piedmont waters. No maximum temperature limit, only monitoring, applies to discharges to estuarine waters.

The effluent shall not cause an increase in temperature of the receiving stream of more than 3°C above the natural water temperature. The effluent shall not cause the temperature in the receiving stream to change more than 2°C per hour. Natural temperature is defined as that temperature of a body of water (measured as the arithmetic average over one hour) due solely to natural conditions without the influence of any point-source discharge.

(3) Chlorine limitation of nondetectable (<0.1 mg/l) and chlorine monitoring only apply to outfalls directly discharging to surface waters where either: (i) a treatment additive that contains chlorine or chlorine compounds is used or (ii) the source of cooling water is chlorinated. All data below the quantification level (QL) of 0.1 mg/L shall be reported as "<QL." Ammonia monitoring only applies where the source of cooling water is disinfected using chloramines.

<sup>(5)</sup> Silver monitoring is only required where a Cu/Ag anode is used.

<sup>&</sup>lt;sup>(6)</sup>Phosphorus monitoring is only required where an additive containing phosphorus is used.

<sup>(2)</sup>Where the Water Quality Standards (9VAC25-260) establish alternate standards for pH in the waters receiving the discharge, those standards shall be the maximum and minimum effluent limitations.

(4) A specific analytical method is not specified; however a maximum quantification level (Max QL) value for each metal has been established. An appropriate method to meet the Max QL value shall be selected using any approved method presented in 40 CFR Part 136. If the test result is less than the method quantification level (QL), a "<[QL]" shall be reported where the actual analytical test QL is substituted for [QL].

<u>Material</u>	Max QL (μg/l)
<u>Copper</u>	<u>1.0</u>
<u>Zinc</u>	<u>50.0</u>
<u>Silver</u>	<u>1.0</u>

Quality control/assurance information shall be submitted to document that the required QL has been attained.

### B. Special conditions.

- 1. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- 2. No discharges other than cooling water, as defined, are permitted under this general permit.
- 3. The use of any chemical additives not identified in the registration statement, except chlorine, without prior approval is prohibited under this general permit. Prior approval shall be obtained from the DEQ before any changes are made to the chemical and/or or nonchemical treatment technology employed in the cooling water system. Requests for approval of the change shall be made in writing and shall include the following information:
  - a. Describe the chemical and/or or nonchemical treatment to be employed and its purpose; if chemical additives are used, provide the information prescribed in subdivisions 3 b, c, d, e and f;
  - b. Provide the name and manufacturer of each additive used:
  - c. Provide a list of active ingredients and percentage of composition;
  - d. Give the proposed schedule and quantity of chemical usage, and provide either an engineering analysis, or a technical evaluation of the active ingredients, to determine the concentration in the discharge;
  - e. Attach available aquatic toxicity information for each additive proposed for use; and
  - f. Attach any other information such as product or constituent degradation, fate, transport, synergies, bioavailability, etc., that will aid the board with the toxicity evaluation for the discharge.
- 4. Where cooling water is discharged through a municipal storm sewer system to surface waters, the permittee shall, within 30 days of coverage under this general permit, notify the owner of the municipal separate storm sewer system in writing of the existence of the discharge and provide the following information: the name of the facility, a contact person and phone number, the nature of the discharge, number of the outfalls, and the location of the discharge, and the facility's VPDES general permit number. A copy of such notification shall be provided to the department. Discharge Monitoring Reports (DMRs) required by this permit shall be submitted to both the department and the owner of the municipal separate storm sewer system.
- 5. The permittee shall at all times properly operate and maintain all cooling water systems. Inspection shall be conducted for each cooling water unit by the plant personnel at least once per year with reports maintained on site.

<sup>(5)</sup>Silver monitoring is only required where a Cu/Ag anode is used.

<sup>(6)</sup> Phosphorus monitoring is only required where an additive containing phosphorus is used.

- 6. The permittee shall notify the department as soon as they know or have reason to believe:
  - a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
  - (1) One hundred micrograms per liter (100 μg/l);
  - (2) Two hundred micrograms per liter (200  $\mu$ g/l) for acrolein and acrylonitrile; 500 micrograms per liter (500  $\mu$ g/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
  - (3) Five times the maximum concentration value reported for that pollutant in the permit application; or
  - (4) The level established by the board in accordance with 9VAC25-31-220 F.
  - b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
  - (1) Five hundred micrograms per liter (500 μg/l);
  - (2) One milligram per liter (1 mg/l) for antimony;
  - (3) Ten times the maximum concentration value reported for that pollutant in the permit application; or
  - (4) The level established by the board in accordance with 9VAC25-31-220 F.
- 7. Geothermal systems using groundwater and no chemical additives. Geothermal systems using groundwater and no chemical additives may be eligible for reduced monitoring requirements.

If a geothermal system was covered by the previous cooling water general permit, and the monitoring results from the previous permit term demonstrate full compliance with the effluent limitations, the permittee may request authorization from the department to reduce the monitoring to once in the first monitoring quarter of the first year of this permit term.

Owners of new geothermal systems, and previously unpermitted geothermal systems that receive coverage under this permit shall submit monitoring results to the department for the first four monitoring quarters after coverage begins. If the monitoring results demonstrate full compliance with the effluent limitations, the permittee may request authorization from the department to suspend monitoring for the remainder of the permit term.

Should the permittee be issued a warning letter related to violation of effluent limitations, a notice of violation, or be the subject of an active enforcement action, upon issuance of the letter or notice, or initiation of the enforcement action the monitoring frequency shall revert to 1/3 months and remain in effect until the permit's expiration date.

- 8. Monitoring results shall be reported using the same number of significant digits as listed in the permit. Regardless of the rounding convention used by the permittee (e.g., five always rounding up or to the nearest even number), the permittee shall use the convention consistently and shall ensure that consulting laboratories employed by the permittee use the same convention.
- 9. Discharges to waters with an approved "total maximum daily load" (TMDL). Owners of facilities that are a source of the specified pollutant of concern to waters where an approved TMDL has been established shall implement measures and controls that are consistent with the assumptions and requirements of the TMDL.
- 10. Notice of termination.

- a. The owner may terminate coverage under this general permit by filing a complete notice of termination. The notice of termination may be filed after one or more of the following conditions have been met:
- (1) Operations have ceased at the facility and there are no longer cooling water discharges from the facility;
- (2) A new owner has assumed responsibility for the facility (NOTE: A notice of termination does not have to be submitted if a VPDES Change of Ownership Agreement form has been submitted);
- (3) All cooling water discharges associated with this facility have been covered by an individual VPDES permit or an alternative VPDES permit; or
- (4) Termination of coverage is being requested for another reason, provided the board agrees that coverage under this general permit is no longer needed.
- b. The notice of termination shall contain the following information:
- (1) Owner's name, mailing address, telephone number, and email address (if available);
- (2) Facility name and location;
- (3) VPDES cooling water discharges general permit number; and
- (4) The basis for submitting the notice of termination, including:
- i. A statement indicating that a new owner has assumed responsibility for the facility;
- ii. A statement indicating that operations have ceased at the facility and there are no longer cooling water discharges from the facility;
- <u>iii. A statement indicating that all cooling water discharges have been covered by an</u> individual VPDES permit; or
- iv. A statement indicating that termination of coverage is being requested for another reason (state the reason).
- c. The following certification: "I certify under penalty of law that all cooling water discharges from the identified facility that are authorized by this VPDES general permit have been eliminated, or covered under a VPDES individual or alternative permit, or that I am no longer the owner of the facility, or permit coverage should be terminated for another reason listed above. I understand that by submitting this notice of termination, that I am no longer authorized to discharge cooling water in accordance with the general permit, and that discharging pollutants in cooling water to surface waters is unlawful where the discharge is not authorized by a VPDES permit. I also understand that the submittal of this notice of termination does not release an owner from liability for any violations of this permit or the Clean Water Act."
- d. The notice of termination shall be signed in accordance with Part II K.
- e. The notice of termination shall be submitted to the DEQ regional office serving the area where the cooling water discharge is located.
- 11. The discharges authorized by this permit shall be controlled as necessary to meet applicable water quality standards.
- 12. Approval for coverage under this general permit does not relieve any owner of the responsibility to comply with any other federal, state, or local statute, ordinance, or regulation.

# Part II Conditions Applicable to All VPDES Permits

#### A. Monitoring.

1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.

- 2. Monitoring shall be conducted according to procedures approved under 40 CFR Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.
- 3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will ensure accuracy of measurements.
- 4. Samples taken as required by this permit shall be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

#### B. Records.

- 1. Records of monitoring information shall include:
  - a. The date, exact place and time of sampling or measurements;
  - b. The individual(s) who performed the sampling or measurements;
  - c. The date(s) and time(s) analyses were performed;
  - d. The individual(s) who performed the analyses;
  - e. The analytical techniques or methods used; and
  - f. The results of such analyses.
- 2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the registration statement for this permit, for a period of at least three years from the date of the sample, measurement, report or request for coverage. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee or as requested by the board.

#### C. Reporting monitoring results.

- 1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to the department's regional office.
- 2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved or specified by the department.
- 3. If the permittee monitors any pollutant specifically addressed by this permit more frequently than required by this permit using test procedures approved under 40 CFR Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the department.
- 4. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.
- D. Duty to provide information. The permittee shall furnish to the department, within a reasonable time, any information which the board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information

as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the department upon request copies of records required to be kept by this permit.

- E. Compliance schedule reports. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- F. Unauthorized discharges. Except in compliance with this permit or another permit issued by the board, it shall be unlawful for any person to:
  - 1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
  - 2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, to animal or aquatic life, to the use of such waters for domestic or industrial consumption, for recreation, or for other uses.
- G. Reports of unauthorized discharges. Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II F, or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II F, shall notify the department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the department within five days of discovery of the discharge. The written report shall contain:
  - 1. A description of the nature and location of the discharge;
  - 2. The cause of the discharge;
  - 3. The date on which the discharge occurred;
  - 4. The length of time that the discharge continued;
  - 5. The volume of the discharge;
  - 6. If the discharge is continuing, how long it is expected to continue;
  - 7. If the discharge is continuing, what the expected total volume of the discharge will be; and
  - 8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the department under the immediate reporting requirements of other regulations are exempted from this requirement.

- H. Reports of unusual or extraordinary discharges. If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the department within five days of discovery of the discharge in accordance with Part II I 2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:
  - 1. Unusual spillage of materials resulting directly or indirectly from processing operations;
  - Breakdown of processing or accessory equipment;
  - 3. Failure or taking out of service some or all of the treatment works; and
  - 4. Flooding or other acts of nature.
- I. Reports of noncompliance. The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

- 1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this subsection:
  - a. Any unanticipated bypass; and
  - b. Any upset which causes a discharge to surface waters.
- 2. A written report shall be submitted within five days and shall contain:
  - a. A description of the noncompliance and its cause;
  - b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
  - c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The board may waive the written report on a case-by-case basis for reports of noncompliance under Part II I if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Part II I 1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II I 2.

NOTE: The immediate (within 24 hours) reports required in Parts II G, H and I may be made to the department's regional office. Reports may be made by telephone or by fax, FAX, or online

http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/PollutionReportingForm.aspx. For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24-hour telephone service at 1-800-468-8892.

- J. Notice of planned changes.
  - 1. The permittee shall give notice to the department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
    - a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:
    - (1) After promulgation of standards of performance under § 306 of Clean Water Act which are applicable to such source; or
    - (2) After proposal of standards of performance in accordance with § 306 of Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with § 306 within 120 days of their proposal;
    - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or
    - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
  - 2. The permittee shall give advance notice to the department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- K. Signatory requirements.

- 1. Registration statements. All registration statements shall be signed as follows:
  - a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
  - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
  - c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- 2. Reports, etc. All reports required by permits, and other information requested by the board shall be signed by a person described in Part II K 1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described in Part II K 1;
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (a duly authorized representative may thus be either a named individual or any individual occupying a named position); and
  - c. The written authorization is submitted to the department.
- 3. Changes to authorization. If an authorization under Part II K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II K 2 shall be submitted to the department prior to or together with any reports or information to be signed by an authorized representative.
- 4. Certification. Any person signing a document under Part II K 1 or 2 shall make the following certification:
  - "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."
- L. Duty to comply. The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act,

except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under § 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under § 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

- M. Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new registration statement at least 90 days before the expiration date of the existing permit, unless permission for a later date has been granted by the board. The board shall not grant permission for registration statements to be submitted later than the expiration date of the existing permit.
- N. Effect of a permit. This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.
- O. State law. Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by § 510 of the Clean Water Act. Except as provided in permit conditions on bypass (Part II U) and upset (Part II V), nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.
- P. Oil and hazardous substance liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under §§ 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.
- Q. Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.
- R. Disposal of solids or sludges. Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.
- S. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- T. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

### U. Bypass.

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause

effluent limitations to be exceeded, but only if it also is for essential maintenance to ensure efficient operation. These bypasses are not subject to the provisions of Part II U 2 and U 3.

#### 2. Notice.

- a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least 10 days before the date of the bypass.
- b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II I.
- 3. Prohibition of bypass.
  - a. Bypass is prohibited, and the board may take enforcement action against a permittee for bypass, unless:
  - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
  - (3) The permittee submitted notices as required under Part II U 2.
  - b. The board may approve an anticipated bypass, after considering its adverse effects, if the board determines that it will meet the three conditions listed in Part II U 3 a.

#### V. Upset.

- 1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part II V 2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.
- 2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
  - b. The permitted facility was at the time being properly operated;
  - c. The permittee submitted notice of the upset as required in Part II I; and
  - d. The permittee complied with any remedial measures required under Part II S.
- 3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.
- W. Inspection and entry. The permittee shall allow the director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:
  - 1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
  - 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
  - 4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this subsection, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

- X. Permit actions. Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- Y. Transfer of permits.
  - 1. Permits are not transferable to any person except after notice to the department. Except as provided in Part II Y 2, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.
  - 2. As an alternative to transfers under Part II Y 1, this permit may be automatically transferred to a new permittee if:
    - a. The current permittee notifies the department at least within 30 days in advance of the proposed transfer of the title to the facility or property;
    - b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
    - c. The board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II Y 2 b.
- Z. Severability. The provisions of this permit are severable. If any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.